



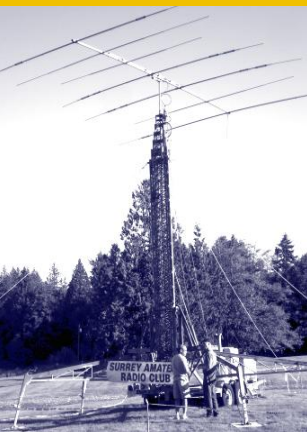
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The SARC Communicator is published monthly for members of the Surrey Amateur Radio Club.

SARC maintains a website at www.ve7sar.net that includes club history, meetings, news and other information.



SARC PIONEER 'SK'

Mike Heritage VE7CLE Was A Founding Member



The initial Surrey Amateur Radio Club meeting, chaired by Doug Moore, VE7CBM, was held in September 1975 in a classroom at the North Surrey Senior High School. Doug was a teacher at the school and had graduated many new, young Hams from his annual courses. In attendance at this meeting were the founding member

VE7's: Doug Moore CBM, Fred Orsetti CJG (now IO), Carl Bertholm CLC, Mike Heritage CLE, Mike Holley AVM, Cary Miller CFC (SK) Vic Medway CON (SK), Cecil Bogies YM (SK), Cory Galbraith CGR, Ken Clarke EZV (now BC), Ron Davies CBT, Ray Sims AXF, Bill Moore BGA, Wayne Horne CNJ, Bob Searle CHB, John Buchanan CTJ (SK), Jim Johnson CSJ (now VA7ET), Al Neufeld CDC, Bill Driscoll ARL, Bren McCullough BGM, Lee Hopwood BDZ, Len TAM, and George Cruikshank (SK). Doug Moore was elected President. Mike became Secretary/Treasurer in 1977 and he remained in this position until 1980 he was a very active member of SARC.

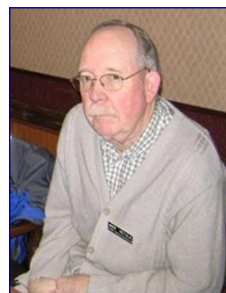
Mike's dad was an amateur radio operator and Mike and his dad spent many hours enjoying contacts on CW and SSB. Ham radio was something Mike thoroughly enjoyed especially the Field Day outings on top of Monkey Mountain. The club purchased a generator, a 204BA monoband antenna, and went after first place in Field Day. In addition to finding time to operate the radios, Mike and his buddy Carl VE7CLC, became well known for their ability to provide the Field Day team with excellent food. I'm sure it was the food that helped move SARC into first place in Canada for several years. Mike always provided much fun, laughter and camaraderie during these outings. It was always a pleasure to work alongside Mike on the radio or setting up antennas. He consistently provided a positive approach.

Mike was also an accomplished Harmonica player and provided entertainment at several SARC

Christmas parties. Mike continued as an active member of SARC and was always ready to help with club projects or help any member who needed a hand.

In the 90's Mike was diagnosed with Parkinson's disease and was forced to retire from his job. You will notice on his QSL card he proudly displayed the Parkinson's Logo and he became a very active member of the Parkinson's Society. This was typical of Mike, always helping others needing a helping hand. During the last few years Mike found it very difficult to operate his radio as his hands were not steady enough to handle the microphone. Not to be deterred, Mike advanced to operating PSK-31 where he made many contacts, but eventually it became very difficult for Mike to continue with any type of radio communication.

Mike was a close personal friend who freely gave his time whenever it was needed. As recently as last September when I was installing a new antenna on my tower Mike was there to help. His Parkinson's made it very difficult for him but he never gave up and for that I will always admire his endurance. Mike spent many hours discussing Parkinson's with my wife, who is also affected, providing her with information and support. My wife and I will miss Mike very much and we both feel privileged to have known him for almost 40 years through the good and the difficult times.



I believe all who knew Mike and shared his love of life, the outdoors and amateur radio will agree he was a special person. At Mike's celebration of life memorial many guests paid tribute to his generosity and his warm personality.

We take some comfort in knowing that Mike is now at peace and free of the stresses associated with Parkinson's.

DE Fred Orsetti VE7IO

Meeting Minutes

Susan Eshelman VE7IIE—SARC Secretary



2010 AGM Meeting Minutes

SARC EXECUTIVE FOR 2011-2012

PRESIDENT

John Brodie VA7XB

VICE PRESIDENT

Bill Gipps VE7XS

SECRETARY

Susan Eshelman VE7IIE

TREASURER

Scott Hawrelak VE7HA

DIRECTORS

Kelvin Hall VA7KPH (SEPARS)

John Schouten VE7TI
(Communicator Editor)

Gary Skett VE7AS
(Education/Training)

George Merchant VE7QH
(Repeaters)

Bill Little VA7ZBL

Chris Zetner VA7CMZ

WEB MASTER

Hui Yee VE7YXG

Meeting Location: PREOC

The Annual General Meeting of the Surrey Amateur Radio Club was held on June 9, 2011. The meeting was called to order at 19:00 by John Brodie VA7XB. A quorum was achieved with 22 of the 77 members in attendance.

1. Agenda and Minutes

The 2011 AGM Agenda was presented. A motion was made by Bill Gipps VE7XS, seconded by Gary Skett VE7AS, to add to the Agenda an item for approval of the 2010 AGM Minutes. The Motion carried.

A Motion was made by Gary Skett, seconded by Bill Gipps, to approve the amended 2011 AGM Agenda.

2. Announcements

It was announced that as per the Bylaws amended last year, the newly elected Executive will be in effect at the end of the AGM.

to the Minutes of the January 12, 2011 General Meeting, at which a discussion took place regarding the increase in club insurance fees. A proposal was made that the issue be taken to the AGM. In the interim, a voluntary \$5 assessment was recommended, and a number of members subsequently donated that amount, which was booked as Donations income.

The following new Membership Fee schedule was proposed:

Individuals - \$30

Families - \$40

\$5 discount for RAC members

A discussion followed in which it was confirmed that the discount would apply to families with at least one RAC member (not that every member of the family had to belong to RAC in order to get the discount). It was reported that the increased insurance cost represented an approximate 100% increase, rising to \$683.20. An HST refund also applied. A Motion for acceptance of the new Membership Fee structure was made by Kelvin Hall and seconded by Bob Cusson VE7WVW. The Motion was carried.

It was confirmed that the new fees are due within 90 days of the September meeting.

5. Election of Officers and Directors

On behalf of the Nominating Committee comprised of Don Hamilton VA7GL, Gord Kirk and Gary Skett, Gord reported that the committee had deliberated on a slate of candidates for Executive and Director positions, reviewing candidate qualifications and various focus areas. The committee proposed the following slate of candidates:

President: John Brodie VA7XB

Vice-President: Bill Gipps VE7XS

Secretary: Susan Eshelman VE7IIE

Treasurer: Scott Hawrelak VE7CNR

Directors: Kelvin Hall VA7KPH (SEPARS)

Bill Little VA7ZBL (At Large)

George Merchant VE7QH (Repeater)

John Schouten VE7TI (Communicator Editor)

Gary Skett VE7AS (Education/Training)

Chris Zetner VA7CMZ (At Large)

Name badges can be picked up by all members who ordered one, with payments going to Scott Hawrelak VE7CNR.

3. Financial Report

Paulette Schouten VE7VPE presented the Financial Report. Having performed a yearly audit of the SARC books, she presented Income and Expense Statements and Balance Sheets for the Gaming Account and the General Account.

A Motion was made by Kelvin Hall VA7KPH to accept the Financial Report. Gary Skett seconded, and the report was accepted unanimously.

4. Increase in Annual Membership Fees

Reporting on this Agenda item, Gord Kirk VE7GRK referred

In addition, the Nominating Committee presented a recommendation that SARC establish a new committee to review the Executive's structure, terms of office, duties and roles, etc. Depending upon changes recommended by the committee, a Special Meeting with quorum may be required in order to vote on proposed changes to the Bylaws.

The election of Officers and Directors commenced with the Secretary presenting the slate of candidates, calling three times for nominations from the floor for each of the ten positions, respectively. No member accepted nomination from the floor for any position. By acclamation, all ten individuals put forward by the Nominating Committee were unanimously approved.

The President extended thanks to members of the Nominating Committee for their efforts.

6. General Discussion

Gary Skett reported that the Fall Basic Ham Class is tentatively scheduled for late September through early December, 2011, on Thursday evenings at the Training Center. Ten individuals have expressed an intention to attend, and another 10 openings will hopefully be filled in the months ahead.

Members discussed whether or not the Weekly Nets should continue through the summer months, with agreement that they should continue. It was suggested by Bill Gipps that an effort be made to encourage new operators to join in. Gord Kirk gave a reminder that the Net preamble is available on the SARC website. Whoever arrives first on the Net at the appointed time is invited to follow the preamble, and begin accordingly.

Likewise, the weekly Breakfast get-togethers will continue throughout the summer, and all members are invited to join in.

John Brodie announced that a donation of a significant amount of equipment has been made to the club by Bill Driscoll VE7ARL. The equipment will be offered for sale at the August Flea Market. A letter of thanks was sent to Bill. Kelvin Hall also reported that Bill has given him a 14' gin pole, which members are welcome to borrow.

There was a call for questions or discussion on issues relating to RAC and SEPAR; none followed.

John Brodie gave an update on the Flea Market, scheduled for August 21, 2011 at the Sullivan Hall. A planning meeting for this event will be held on June 18th [subsequently changed to June 21st - JB] Bill Little is in charge of raffle tickets for the event, and members are encouraged to sell ticket books as a club fund-raiser.

Announcements were made about three members currently experiencing health problems. Fred Orsetti reported the recent death of a founding member of SARC - Mike Heritage VE7CLE. Mike joined SARC in 1975, and was made a Life

Member a few years ago. Mike departed on May 21st following an extended illness. Approximately eight SARC members and hams attended his memorial service. A minute of silence was observed in honor of this Silent Key.

7. Field Day 2011

John Brodie gave a report on preparations for the upcoming Field Day, showing a map of the site at Grandview Heights. SARC secured the site with the help of Surrey Fire Service. Langley ARC will be bringing their satellite antenna truck, and SARC's two towers will be raised, along with various other antennas and comm infrastructure.

On June 11th, Fred Orsetti VE7IO is leading a workshop for Field Day participants, covering contesting basics and logging software, with an emphasis on how-to's for newbies. After the meeting, there will be a trial run set-up of the new club tent.

At this year's Field Day there will be a new emphasis on winning the contest, in addition to having fun. A final planning meeting will be held on June 15th, and volunteers are encouraged to attend.

8. Closing Announcements and Adjournment

Wednesday, June 22, 2011 is the next Executive Meeting.

September 14, 2011 is the next General Meeting.

John Brodie called for any additional New Business, with no response. He deferred a discussion of suggestions for club activities in the coming year, suggesting it be conducted at the next General Meeting.

John extended his thanks to all the Executive members and Directors, past and incoming, and to all volunteers. On behalf of the members, Bill Gipps likewise extended thanks to John for his excellent service.

Bill Gipps moved that the Annual General Meeting be adjourned. It was seconded by Kelvin Hall and the motion was carried.



Mike VE7CLE

Snapshot

SARC Annual Fox Hunt

The annual SARC "Fox Hunt" has now grown in popularity and this year was no different.



The event was held on May 14th in Crescent Park in South Surrey. Hams from Burnaby and Delta clubs supported the event, 22 Hams and some spouses in total. There were 5 low wattage VHF transmitters (foxes) hidden throughout the park and participants were allocated two hours to find them. There were two classes of entrants; a novice class and an advanced class. Though the event is focused on improving one's RDF skills, much fun was had by all exchanging ideas about home brew directional antennas and attenuator kits.

The second half of the event was the informal BBQ. Under slightly overcast skies, members enjoyed warm camaraderie and recreation over a burger and hot dog.

The second half of the event was the informal BBQ. Under slightly overcast skies, members enjoyed warm camaraderie and recreation over a burger and hot dog.



Recognition and thanks to Amel VE7KBA of BC Radio Sport for his efficient handling of all the

technical aspects of the "foxes". Much thanks is given to all the volunteers for their assistance at the BBQ.

Mark your calendars for approximately the same time next year and we look forward to another successful event.

The results:

Novice category:

1st place, Stevie Van Skiver - VE7SMX, 5TXs, 1h48m5sec
2nd place, Fred Orseti - VE7IO, 3TXs, 1h48m30sec
3rd place, Jim Hurell - VE7HUR 2TXs, 1h52m10sec



Advanced category:

1st place, Grant Van Skiver - VE7GVS, 5TXs, 1h26m50s
2nd place, Keith Witney - VE7MID, 5TXs, 1h29m35s

Report

Kelvin Hall VA7KPH



Monthly Workshops

The monthly SEPAR workshops continue to provide all SEPAR members with training and an opportunity to get to know each other. The June 16th workshop was the last one before the July/August summer break. Workshops will commence again in September 2011. Discussions are under way regarding a new format for the workshops. Information will be e-mailed over the summer months for input and feedback.

Monthly exercise with Langley

The June exercise between SEPAR and Langley will be the joint participation in Field Day 2011. This is an excellent opportunity to practice emergency communications and meet your colleagues from Langley. Please set aside time on June 24 to 26th

School workshop

The workshop with Pacific Heights on May 11th was a success thanks to all the volunteers. A number of letters complimenting the volunteers have been received and have high praise for their knowledge. The next public workshop is the Newton Library on July 13, 2011. This is an important event and any assistance is greatly appreciated.

City of Surrey EOC Exercise

SEPAR provided emergency radio communications for the City of Surrey EOC exercise on May 27th. The exercise at Firehall #1 was very well received and SEPAR was complimented on their participation. Future EOC exercises will focus on specific groups and their specialty skills. SEPAR has been identified as one of the services that need to be better understood by the EOC members and one of the EOC exercises will be built around emergency radio communications.

Weekly Net

UHF practice message handling has been added to the weekly SEPARS net. In addition to a practice message on VHF simplex, messages are sent on 446.100 simplex and 443.775+ (110.9) after the VHF messages. Please check in if you have not become a regular participant.

Communications Vests

Please remember to wear your SEPAR vest to Field Day 2011 and all upcoming SEPAR sanctioned events. Wearing the vest is a visual confirmation to the general public that emergency radio communications can be established. The vests also lend a touch of professionalism to our presence at events.



Field Day

June 25 & 26



Field Day, held every year on the last weekend of June, is the premier event for most amateur radio clubs in North America. Field Day is part emergency planning, part contest, part public awareness and 100% fun. Once again, Surrey Amateur Radio Club (SARC) is joining forces with Langley Amateur Radio Association (LARA) and Surrey Emergency Program Amateur Radio Society (SEPARS). The event will be held at Grandview Heights School grounds located at the intersection of 20th Avenue and 176th Street in Surrey.

We will use the call sign VE7LSY and operate 4 HF stations on CW, SSB and digital modes from 160 m to 6 m and will also have a VHF/UHF station set up. A GOTA (Get-on-the-Air - for beginners) station will use the callsign VA7SRY. All stations will operate under emergency power. Two towers equipped with beams plus wire antennas will be deployed for radios in Go Kits provided by SEPARS. Computers at each operating station will use N1MM logging software, networked together. A satellite demo is planned. Public officials have been invited. Lunch and dinner on Saturday, and breakfast on Sunday morning will be provided at a nominal cost to cover expenses. The FD site is large and can accommodate motor homes, trailers and tents parked on the field.

Setup will be on Friday afternoon June 24th starting at 12 noon, with the contest beginning at 11 am Saturday and continuing all night until 11 am Sunday, after which time the equipment will be taken down.

Surrey Council has declared the week of June 19th as "Amateur Radio Week" in recognition of the service that amateur radio operators provide to the community (*see page 7*). The request for the proclamation by the Presidents of SEPARS and SARC has been endorsed by Len Garis, Fire Chief and Surrey Emergency Coordinator. Councillor Marvin Hunt, an honorary member and enthusiastic supporter of SARC, will participate as he has done in previous years. Other politicians at the federal and provincial level, as well as emergency officials, have been invited to attend.

If you are coming to Field Day, don't forget to bring:

- Your tent, motor home, camper van or trailer if you wish to stay overnight
- A lawn chair for yourself and any other family members attending
- personal name badge

For planning purposes, it is essential that you email John ve7ti@rac.ca by Wednesday if you wish to operate and/or partake of prepared meals.

You can re-live some of the 2010 experience by clicking the link: [Surrey - Langley FD 2010](#)



Proclamation

AMATEUR RADIO WEEK

June 19 - 25, 2011

WHEREAS the City of Surrey has several hundred licensed Amateur Radio operators who have demonstrated their value in public assistance by providing radio communications during emergencies and public service events; and

WHEREAS Amateur Radio operators in the City of Surrey donate their services free of charge to the City, in the interest of the citizens of the City as well as the Province of BC and Canada; and

WHEREAS these Amateur Radio operators are on alert for any emergency, local, regional or worldwide, and practice their communication skills during the annual Field Day exercise; and

WHEREAS this year's Amateur Radio Field Day will take place on June 25 & 26, 2011;

NOW, THEREFORE, BE IT RESOLVED that I, Dianne L. Watts, do hereby declare June 19 - 25, 2011, as "AMATEUR RADIO WEEK" in the City of Surrey, in recognition of this important emergency preparedness exercise, and call upon all citizens to pay tribute to the Amateur Radio operators of our City.



Mayor

Radio-Active

Our profile this month introduces Keith R Stebbings KE1THR. Originally licensed in the mid '70s (WA1TGV) He let it lapse but just recently he retested and made it to Amateur Extra. Keith's winter time job is with the Wallowa Avalanche Center in Joseph, Oregon.

Back in the 70's Keith never would have been able to carry a full rig setup covering HF, VHF, and UHF on a bicycle. This summer he has everything needed and began a long bicycle tour from Fairbanks, AK to Brownsville, TX on May 12th, expecting it will take five months and about 8000 miles. Periodically Keith will be on 17, 20, 40 and 80 meters and will be looking for local contacts on 2 meters and 440. He's also on APRS for the entire trip. (see www.aprs.fi and type in KE1THR-4 in the search box or click [HERE](#)). You can select different time periods also. During the tour, updates will be posted on his site at www.wallowaavalanchecenter.org/cycletour



The two radios he'll be carrying are a Yaesu VX-6R handheld 3 band and Yaesu FT-857 mostly for HF. Photos show the Outbacker Stealth-Plus antenna for HF and a 2 meter/440 whip for APRS and higher power VHF/UHF contacts. Power consists of a dry cell 17AH battery and flexible solar panel for recharging. The photos shown are taken in his home town of Joseph, OR where Scott, KB7DZR helped with the build.

The following bands/freq. will be likely places to find him during the tour. Band conditions and HIS condition may cause Keith to miss some check-ins. Remember he's on a bicycle without any cover from rain/wind/etc. When within reach of local 2M/440 repeaters he'll be monitoring them.

Tuesday's and Friday's Keith will try to check in with the following nets at the published Pacific times.

- 80 meters: BC Boaters net **3855** @ 7pm PDT, BC/Yukon net **3716** @8:30pm PDT
- 20 meters: Maritime net **14.300** around 8 pm PDT
- 40 meters: Noontime net **7268.5** @ 12 noon PDT (in and out and random days, not necessarily Tues./Fri.)

Keeping in touch with my hometown HAM buddies and anyone else who wants to join in Tuesday's and Friday's on the following:

- 20 meters: **14.157** 1900-1910 PDT (Extra only)
- 17 meters: **18.157** 1910-1920 PDT (General and above)



- 40 meters: **7.157** 1920-1930 PDT (Advanced and Extra)
- Once Keith get a QSO going on the first available band he will stay there and ragchew for the evening. It is likely, if contacts are made on 14.157 Mhz, that he'll have folks move to 17 meters if it's open.

Safe travels and Good Luck Keith... hope to see you pass through Surrey!

An Ounce Of Prevention

Some simple steps to keep what's yours...

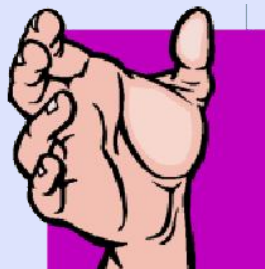
Take a good look around every room in your home, your ham shack as well as outside in your garage, shed and car. Consider all the things you would be sorry to lose or find hard to replace - then mark them.

Particularly as Amateurs, we may have thousands of dollars worth of equipment in our car or home.

Remember that anything remotely useful or attractive is resalable. For instance, all your electrical and mechanical goods, household appliances, furniture, pictures, ornaments, antiques and silver, in fact anything can be a target of thieves. Garages and gardens sheds are also at risk. Protect your lawn mower and keep your tools locked up. They may well be used by an intruder to force his way into your home! Finally, always lock your car no matter where it is parked and remove any valuables from sight.

Marking is easy

Property Marking is a quick, easy Do-It-Yourself job, and it costs so little. For an outlay of only a few dollars and an hour or so of your time you could be saving yourself a great deal of money, inconvenience and personal anguish.



Permanent Marking

Engraving and punching identifies your property for good. Inexpensive tools and kits for the job can be bought from DIY and hardware stores. Improvising by scratching to save yourself the outlay is acceptable but might need a little extra care.

Invisible Marking

For antiques or other valuable property which might be devalued or spoiled by visible marking, there's an invisible ultra-violet marker. Burglars cannot see it, but if something marked is stolen police can identify it with a special ultra-violet lamp. UV markers are available from most good DIY stores and stationers at around five dollars. It's important to remember that UV marking fades and will need to be renewed every so often.

There are three ways of marking

- Engraving with an electric engraving tool, fine drill or other sharp-pointed tool. Use a template or stencil or simply do it freehand.
- UV marking the invisible method using an ultra-violet



pen. Simple to use - but needs renewing periodically.

- Punching With a hammer and a set of punches bearing marking information. Use only on heavier metal, items such as bicycles, mowers or engines.

Note that aluminum is easily damaged by punching and should not be marked in this way.

What to engrave

At one time it was suggested that you mark your property with your SIN number. This is no longer the case. Police cannot readily trace SIN numbers, complicating the return of your property. Drivers License (DL) numbers however, can be tracked from any mobile police terminal in seconds! In most cases, police who find property in the hands of suspicious characters will attempt to verify it immediately via the Canadian Police Information Centre (CPIC). Stolen property from across Canada is entered on this system and it can be accessed in seconds. Engraving the DL Province of issue before the number will assist police, for example:

BC DL 1234567

In the case of a business or organization, police agencies will issue an '[Operation Provident](#)' number. This Program is meant to provide an easily traced number to identify ownership where it is not the property of a single individual.

Where to mark your property

Where you mark your property matters, particularly if you are using the engraving method. If you prefer the mark to remain out of sight, you'll obviously choose somewhere behind or underneath the article.

If you purchase a used item that has been marked, engrave a single line through the previous marking and place your DL number above or below it. The really important thing to remember is to select a surface that can't be removed without spoiling the basic appearance or performance of the article.

Keep a record of your property

You can protect items that can't be marked, and those that can, by keeping a record of them. A simple and effective way of doing this is to photograph each item, prefera-

(Continued on page 10)



(Continued from page 9)

bly in colour, paying special attention to any distinguishing marks such as initials or crests which may be used to identify the item. Take the photograph against a plain background and include a ruler to give an idea of size.

Use the record form to keep a list of the items you have marked and where the marks are. It's a good idea to give a second copy of the list and the photographs to someone you trust for them to look after. If you have property stolen, be prepared to provide copies of serial numbers and photos to police.

Do not advertise your absence

We all chat on the various repeaters but we do not always know who is listening in. The AR bands are open to monitoring by many people including unscrupulous ones with scanners. Mention of your intended absence on holidays may be advertising for those with criminal intentions to pay you a visit. As you know, the RAC database is readily available to anyone with an Internet connection and it takes only minutes to look up your call-sign for your address.

For more advice on marking or protecting your property, contact your local police station.

News You Can Use

What's Happening in Amateur Radio

Lottery Grant Purchases

The Epson projector has been put to use by SARC instructors in teaching a course to prospective new amateur radio operators leading to Industry Canada certification. The Spring 2011 class, held over 9 weeks, was successful in licensing 16 new operators, several of which are now actively involved in the Surrey Amateur Radio Club and Surrey Emergency Program Amateur Radio Society. The second purchase was a 16' x 20' tent for use at exercises (or a real emergency). It will be first put to use at the June 25/26 Annual Field Day exercise, which provides an opportunity for the public and local politicians to observe amateur radio communication under the chaotic conditions which would occur during a real emergency.

Three antennas (for 144, 220 and 440 MHz) have been acquired and will be used at a new repeater location on a 36 storey Surrey high-rise tower, once the City of Surrey completes its legal agreement for use of the site. The most recent purchase is for new repeaters for 144 and 440 MHz, including controller and power supply. Still outstanding is the acquisition of IRLP controllers which will facilitate interfacing of radios with the Internet. Professional installation of all purchased equipment, including mounting of hardware and feedlines is also outstanding. When fully functioning later this year, the new equipment

combined with the new location will significantly improve the ability of amateur radio operators to assist Surrey Emergency Program by reliably communicating by radio within and outside the City, especially areas where coverage is poor with the existing repeater location.

Delta Advanced Course

The Delta club reports that they are well underway on putting the finishing pieces in place for their Advanced Radio Course. Although the dates haven't been finalized yet I can tell you that the course will start late October, run through November and maybe the first week of December.

The fee structure is almost complete and hopefully next week they'll have an announcement about the price.

Delta invites all interested hams to please read and understand what the course is about and what you should be prepared for. Check <http://www.deltaamateurradio.com/advanced.html> and if you have any further questions please email regarding registration, dates, fees etc. to: course@deltaamateurradio.com and questions about the contents of the course to: instructor@deltaamateurradio.com

QRM

...from the Editor's desk



Do you have a photo or bit of club news to share?
Email it to ve7ti@separs.net for inclusion in this column.



Kelvin Hall VA7KPH has a new tower. Over two days Kevin VE7ZD's HF beam and tower were disassembled by a willing crew and they will find a new home at Kelvin's QTH during the summer.

Kudos to **Fred Orsetti VE7IO**. Fred has quietly slipped away from both the SARC and SEPARS Executive, choosing not to run so that he can spend more time with his XYL Marion who suffers from Parkinsons. Despite this Fred has remained a great contributor, involved in many events from both groups and always a willing 'Elmer'. Fred is pictured here instructing a class at the recent Field Day Training session.



INDUSTRIAL RADIO FIELD-FONE

THE SMALLER, LIGHTER 2-WAY
PORTABLE RADIO FOR CD AND OTHER
VITAL COMMUNICATION REQUIREMENTS

Unit consists of a crystal controlled FM transmitter, crystal controlled dual conversion superhet receiver, weather resistant push-to-talk handset and self contained batteries in a convenient and attractive carrying case. Simplicity of operations and exceedingly good operating range have won instant approval for all portable 2-way applications. FIELD-FONES carry F.C.C. and F.C.D.A. type designations.

INDUSTRIAL RADIO PAK-FONE

2-WAY PORTABLE RADIO WITH 3-WAY POWER
SUPPLY

The PAK-FONE is a complete portable communication center which may be operated on 115 V.A.C., from a 6 or 12 volt auto storage battery or from its self contained batteries. Dual conversion superhet receiver provides good loud speaker reception. Greatly increased battery life is achieved through use of a relay type squelch circuit which switches off audio filaments when no incoming signal is present. Crystal controlled FM transmitter operates with push-to-talk button on microphone. PAK-FONES carry both F.C.D.A. and F.C.C. license designations for operation in 40 MC and 150 MC bands.

FACTORY REBUILT AND GUARANTEED PACK-SETS
Similar to the PAK-FONE but designed for operation on self-contained batteries only, Industrial Radio PACK-SETS represent outstanding values in 2-way portable equipment.

MODEL 3035 . . . PRICE ONLY . . . **\$225.00** F.O.B. Factory

TRANSMITTER
8 Tubes — Crystal Controlled
FM DEVIATION: ± 15 KC
SPURIOUS RADIATIONS —
At least 40 db below carrier
level.
TEMPERATURE RANGE —
—30° C to 60° C
OUTPUT — 1 Watt

RECEIVER
15 Tube Dual Conversion Super-
heterodyne, CRYSTAL CON-
TROLLED.
SENSITIVITY — .5uv for 20
db quieting.
SELECTIVITY — 75 db. plus
or minus 80 Kc.
OUTPUT — .2 Watt

STANDARD EQUIPMENT:
Microphone and Antenna. Crystals extra.

OPTIONAL EQUIPMENT:
Weather resistant canvas carrying case, car window or roof top antennas.

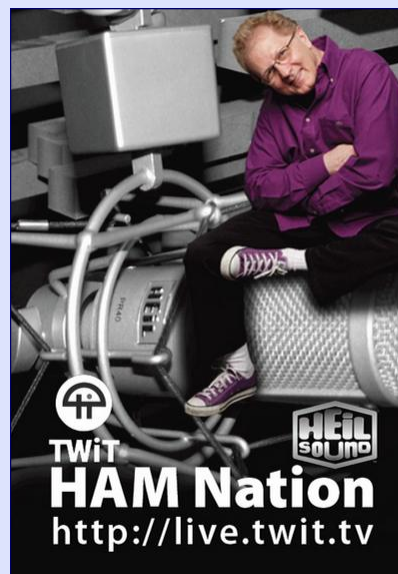
Write for literature and prices . . .



INDUSTRIAL RADIO CORP.

428 N. PARKSIDE AVE., CHICAGO 44, ILLINOIS

From the 'We've Come A Long Way' Department



As reported in the May Communicator, 'HamNation' is a new weekly podcast on the TWIT network. Host and microphone guru Bob Heil now has 4 episodes completed and they have each featured a different aspect of the hobby with promises of much more to follow.

Aerial Adventures

Gary Skett VE7AS



Rebuilding an Old Classic

When Bill took possession of a gift of an old Wilson 5 element 20 metre mono-band Yagi, I was given the assignment of getting it back on the air. I was delighted when the antenna came with its original manual, a bonus for sure. It also came with a lot of handwritten notes, mods and upgrades with someone's ideas on making the original design better - which I ignored the second time.

This antenna, appeared to have had at least 2 owners before Bill took possession, each adding their own concept of how the antenna should be put together. So the challenge was to decide what version to use for assembly.

To digress for a moment, the Wilson M520 Yagi was designed by W7GVA for Wilson Electronics in Henderson, Nevada in or around 1970. The Yagi Bill has, appears to have been initially purchased January 29th, 1972 by WA7BAY.

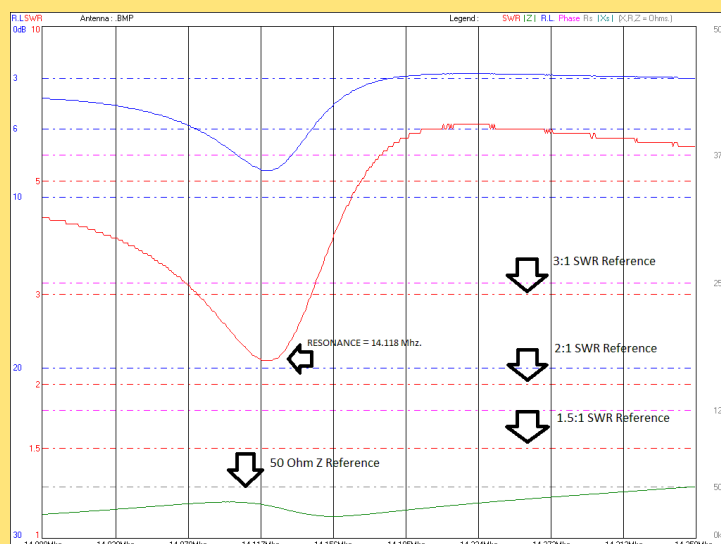
At some point, the antenna was bought by Heinz VA7AQ and was in operation of over a decade, then disassembled and sat neglected for years... as old antennas often do. When it came time to unwrap the bundles of tubing and do an inventory, there were pieces that needed replacing - some because the tubing had cracked over time, and some because they were simply missing. About \$50 worth of new tubing and hardware and we were on the road to putting some signals through the old Yagi once again.

Spec time... It was amazing to see the original 1972 price tag was only \$159.95 USD! Today, you would have to spend around \$750 for the very same antenna... amazing! Gain was stated at 12db, very nice... that means if you pumped 1000 watts into it, you could expect 10,000 ERP for the first 10db and if it was 13db the extra 3db would double that to 20,000 watts effective radiated power, so 1 db less would still give you somewhere between 18K-19K ERP! Pretty respectable. B/F ratio, 20db - or 100 times difference between signals received from the front and the back of the antenna. Boom 40 feet, width 36 feet. 6 square feet of surface area, 145 pounds of wind load up to 100 mph before the self-destruct sequence. Weight - 85 pounds. All-in-all, a very impressive looking antenna when it's all put together.

Now I won't go through the gritty details of the first attempt to assemble the antenna, by suffice it to say, I learned this:

1. Use a tape measure with only ONE scale on ONE side;
2. Use friends who know how to read a tape measure; can see the numbers (make sure they wear their glasses) and can divide that number by two (to find centre);
3. Don't rely on several people taking turns "helping" you assemble the elements, because it is a documented fact, men can't multi-task well and;
4. Don't rely on those same friends to actually tighten all the clamps on all the elements for the same reason mentioned in item #3.

The end result [zoom in on your PDF reader] is :

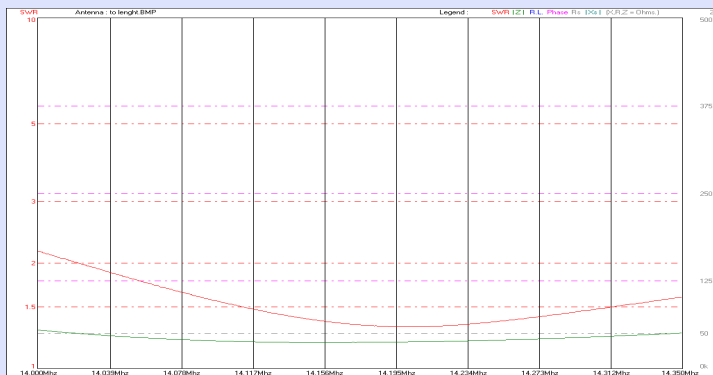


Above is a 14.0 to 14.350MHz. VNA scan. The blue line represents the Return Loss, which should be greater than -30db down, it's only -8db - dismal. The red line is the SWR or VSWR and it's only below 3:1 between 14.080 to 14.140 - not good. The Impedance line [green] shows that it's below 50 ohms... not what I was expecting... so something's wrong... See items 1 to 4 above for the reason.

So, a week or two later, I took it all apart and started from scratch. Used the original measurements, a better tape measure and worked alone. I added new tip elements, re-measured everything and decided to assemble the Yagi one element at a time and adjust the gamma match as I went, starting by taking the gamma measurements back to the manual's original lengths. Best decision I made... as it turned out.

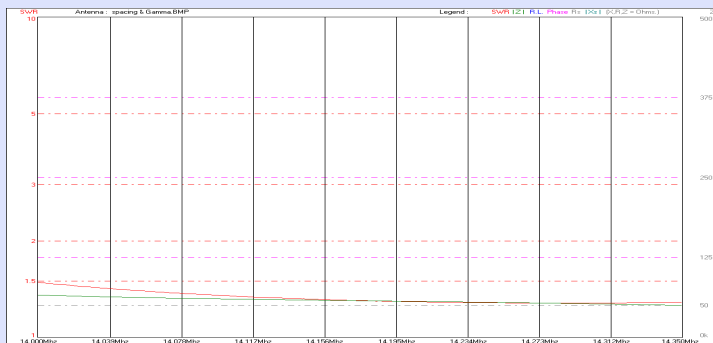
No success getting it to work with just the driven element on the boom. Discovering that a gamma matched "dipole" doesn't work well on its own - unlike a trapped dipole. So I

added the reflector and made another measurement.



As you can see, the 2:1 bandwidth expanded to 14.050 to 14.350, or basically 90% of the 20m band. Resonance was around 14.190 Mhz. And the Z [impedance] very close to 50 ohms, but more importantly almost flat across the band. So with just adding the reflector to the driven, we have a 3db gain 2el Yagi... Useable as is! Why? Because the gamma match needs the interaction of the parasitic elements to work it's phasing magic.

Now time to add the first director... after re-adjusting the spacing, here is what I got on the VNA:

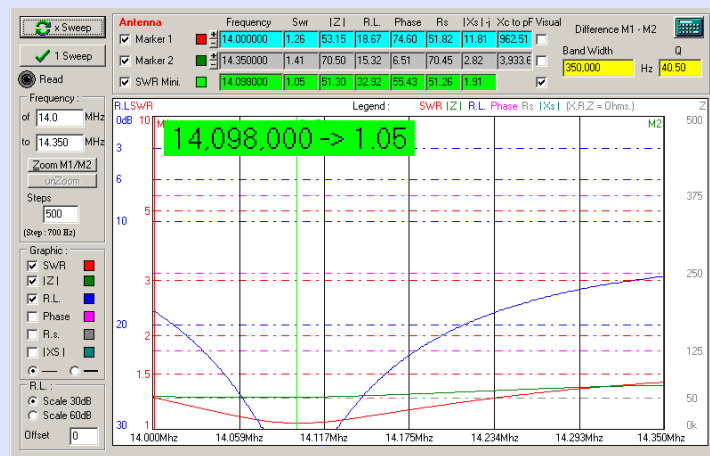


Getting better! 1.5:1 SWR or better across the entire band.... Impedance improvement too. Amazing how the interaction affects things. We now had a 3el Yagi with about 6db gain.

Rather than adding the last two directors, one at a time and spend another hour playing with the gamma match, I added the last two directors, checked the spacing and then pointed the fully assembled Yagi north [the reflector near the C-cans]. I forgot to save a screen shot, but it was slightly higher at the top end of the band, more resonant toward 14.300 than the desired 14.200... I should have left it, but I decided to tweak the gamma just one more time...

Note to self: If it's pretty darn close to a low SWR [below 1.5:1] and it's "almost" flat across the band...then leave it the heck alone! Oh, but no...I had to tweak it..and do you think I could make it better or even get back to the above measurements? No... Sigh!

After admitting that I could not make it perfect, and rotating it 90 degrees - the antenna now pointing ESE or the boom basically parallel to the C-cans, here is what we ended up with:



Ok, we see the resonance has dropped considerably - down to 14.098 with a VSWR of a respectable 1.05:1 [red line]. The return loss [blue line] is well below -30db which is what is expected with a low VSWR. The green impedance line is good too, staying close to 52 ohms.



NOTE: The antenna is only 10 feet off the ground, too close to the C-cans and the propane tank so this graph will [no doubt] all change once the antenna is on top of one of the 50 foot telephone poles. We'll all just have to wait for the last VNA measurement... if only I we had the same success with the AP8 vertical. Stay tuned!

SARC President's Comments

John Brodie VA7XB



Busy times ! The FD committee is hard at work ironing out a myriad of details before the big event on June 25/26. The objective this year is "WIN". To that end, on Saturday June 11th, SARC hosted a Field Day Workshop at the Fire Training Centre attended by about 20 members of SARC, LARA and SEPARS. The material was well organized and very professionally presented by Fred Orsetti VE7IO who started the workshop with some advice about winning strategies followed by a 15 minute video of contesting tricks and techniques distilled from a workshop given by Neil King VA7DX.



After that, John VA7XB showed a marked-up air photo of the proposed FD layout at Grandview Heights School which generated some discussion. Fred moved on to explain the use of N1MM logging software and then guided a role simulation to demonstrate how the voice exchanges are done on SSB. Many questions followed to clarify the setup and the procedures to be used. The most important message from the seminar was to "act like the big dog" and always operate in "RUN" mode (i.e. pick a frequency, call CQ and let others respond to you) - search-and-pounce is for sissies according to Fred! This is the winning attitude that will get us to the top, Fred advised, while emphasizing that this is SARC's most ambitious FD project ever, with an unequalled array of antennas at a first rate location and some excellent operators lined up to fill the schedule. There will be something for everyone: 3 HF stations running CW, SSB and digital (RTTY and PSK) from 160 metres to 6 metres, as well as VHF/UHF and a fully-equipped GOTA station set up for coaching of beginners with full access to all the

antennas. We hope also to have LARA's satellite station operating - a big hit with visitors. At the conclusion of the workshop, the attendees erected SARC's new 16' x 20' canvas tent that will be used on FD. Thanks to Fred for a great job of organizing the workshop.

Please mark your calendar for this big weekend. Come out any time after noon on Friday, June 24th for the setup. We now have a functioning air cannon (assembled by Fred) to lob the antenna anchor wires over the treetops. Three towers will be set up, and beams need assembly, along with tents and canopies. Bring your own lunch, snacks and supper on Friday as no prepared meals will be available until Saturday noon. Also, very important: go the www.ve7sar.net and click on the link to the operating schedule and meal schedule. You will then have to email John VE7TI at ve7ti@separs.net to indicate your preferences and he will fill out the spreadsheet. If you do not let us know how you want to participate, you may be disappointed to find that all operating times are filled, and there is no food for you.



Once the dust has settled on FD, we will turn our minds to the next challenge, i.e. our Summer Flea Market (aka "Swap Meet"). The next planning meeting has been deferred until mid summer but many of the preparations have already been completed. Uncertainties over late August weather suggested that we have an indoor event this year and Sullivan Community Hall has been booked for the occasion. Vendors will have the opportunity to sell from one of about 25 indoor tables or from their vehicle in the parking lot. SARC has accumulated some donated gear from retired hams and SKs that will be offered for sale to provide funds for future club purchases and projects. We will definitely need the help of many volunteers to make this a success. Your new Executive wishes all of you out there an enjoyable summer with friends and family in the sunshine.

DOWN THE LOG...

SARC Monthly Meetings

2nd Wednesday (Sept-Jun)
1900 hrs local at PEP PREOC,
14275 96th Avenue, Surrey, BC

Weekly Club Breakfast

Friday at 0830 local
ABC Country Restaurant located
at 600 - 7380 King George Blvd.
Surrey

SARC Net

Tuesday at 2000 local
on 147.360 MHz (+) Tone=110.9

SEPARS Net

Tuesday at 19:30 local
on 147.360 MHz (+) Tone=110.9

Announcements & News

Next SARC Meeting
Wed., Sept 14th @ PREOC

SEPARS Monthly Workshop
Third Thursday, 7 to 9:30pm
Rm. 214, 13569 76th Ave.

Field Day!

Setup Fri, June 24 at Noon—
176th Street at 20th Avenue,
Surrey. Contact John VA7XB

SARC Ham Swap Meet

August 21st at Sullivan Hall,
details to follow.

On the Web ve7sar.net

Between newsletters, watch your e-mail for announcements of events, monthly meetings and training opportunities. These announcements may also be found on our web page.

SARC hosts an Amateur Radio net each Tuesday evening at 8 PM. Please tune in to the VE7RSC repeater at 147.360 MHz (+600 KHz) Tone=110.9, also accessible

on IRLP node 1980 and Echolink node 496228. On UHF we operate a repeater on 443.775MHz (+5Mhz) Tone=110.9 and IRPL node 1463. Coming soon, a repeater at 224.000MHz (-1.6MHz).

VIA THE WEB

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